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09/945,096	08/31/2001	Melissa E. DeRosier	4846-001	3163
24112	7590	08/20/2007		
COATS & BENNETT, PLLC 1400 Crescent Green, Suite 300 Cary, NC 27518			EXAMINER JARRETT, SCOTT L	
			ART UNIT	PAPER NUMBER
			3623	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/945,096	Applicant(s) DEROSIER ET AL.	
	Examiner Scott L. Jarrett	Art Unit 3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 39-53 is/are pending in the application.
- 4a) Of the above claim(s) 39-45 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 46 and 49-53 is/are rejected.
- 7) ☒ Claim(s) 47 and 48 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This **Final** Office Action is in response to Applicant's amendments filed May 25, 2007. Applicant's amendment canceled claims 1-38 and added new claims 39-53. Currently claims 46-53 are pending with claims 39-45 being withdrawn herein as being directed to a non-elected invention.

Response to Amendment

2. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action.

Response to Arguments

3. Applicant's arguments with respect to claims 46-53 have been considered but are moot in view of the new ground(s) of rejection.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., that probability scores are calculated based on the performance of a sufficiently large number of sociometric analyses wherein the z-scores of each of the questions administered for a given individual take the form of a series of normal distributions, wherein the mean of the individual's current score on that question and the mean of the standard deviations equivalent to the standard deviation of the current distribution, Remarks: May 25, 2007: Paragraph 2, Page 7) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the

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specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Further it is noted that calculating z-scores of each of the questions administered for a given individual take the form of a series of normal distributions, wherein the mean of the individual's current score on that question and the mean of the standard deviations equivalent to the standard deviation of the current distribution is old and well known – as taught by at least Sherman, Lawrence, *Sociometry In The Classroom: How To Do It* (October 19, 2000), Page 40.

$$\frac{\text{Child's score} - \text{mean}}{\text{standard deviation}} = \text{z-score}$$

It is noted that the applicant had not effectively challenge the officially noticed facts cited in the pervious Office Action(s) therefore those statements as presented are herein after prior art. Specifically it has been established that it was old and well known in the art at the time of the invention:

- to perform error checking by re-executing (re-sampling, re-taking, re-presenting) similar or identical questions during a survey;
- to classify/categorize respondents into a plurality of categories such as popular, rejected, neglected, controversial, average and unclassified utilizing one or more sociometric parameters, specifically using social preference and social impact, as well as to classify respondents "falling" into the middle range of values on a

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continuous/linear spectrum from popular → neglected as average (typical, common, normal, etc.);

- *to indicate the probability score* (concordance, correspondence, accuracy, strength/weakness, etc.) *of a calculated/determined measure* (metric, value, parameter, score, etc.) to a classification/category wherein such scores provide an indication of the how “close” (well) the score is to the “ideal” (typically, expected) value(s) for that category; and

- to represent a continuous value (measure, score, etc.) utilizing a continuum/scale/range via a linear bar/graph (slider bar) provides a convenient mechanism for indicating where on the continuum a value lies.

Election/Restrictions

4. Newly submitted claims 39-45 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: claims 39-45 are directed to a method of displaying sociometric data/results using a scatter plot, invention I, while claims 46-53 are directed to a sociometric data collection and analysis method using surveys to obtain peer nominations from school children, invention II.

The Inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention I has separate utility such as displaying points indicative of sociometric data/results on a graph regardless of the sociometric collection and/or analysis methods utilized to generate the data/results. The subcombination has a separate utility such as displaying sociometric results on a scatter plot for any number of well known sociometric data collection and analysis methods. Further invention II may utilize any of a plurality of methods of displaying the sociometric classifications of the group of schoolchildren. See MPEP § 806.05(d).

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 39-45 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Objections

5. Claims 47-48 and 53 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 51-53 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding Claim 51, Claim 51 recites the limitation "**the** total probabilities" in Claim 50. There is insufficient antecedent basis for this limitation in the claim.

Examiner interpreted the claim to read "a total probabilities" for the purposes of examination. Appropriate correction is required.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 46 and 49-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over SSRAT as evidenced by at least the following reference: Maassen et al., SSRAT: The processing of rating scales for the determination of two-dimensional sociometric status (1998).

Regarding Claim 46 SSRAT teaches a method of sociometric analysis of a group of schoolchildren comprising (Figure 1; Tables 1, 3):

- surveying the schoolchildren to obtain peer nominations to social preference questions (Column 1, Last Two Paragraphs, Page 675; Column 2, Paragraphs 1-2, Page 676; Column 2, Paragraphs 2-3, Page 678; Table 1);
- analyzing the peer nominations to generate standardized liked most (zLM) and liked least (zLL) metrics for each schoolchild (Column 1, Last Two Paragraphs, Page 675; Column 2, Paragraphs 1-2, Page 676; Table 1);
- generating standardized Social Preference (zSP) and Social Impact (zSI) scores from the standardized liked most and liked least metrics (Column 1, Last Two Paragraphs, Page 675; Column 2, Paragraphs 1-2, Page 676; Table 1);

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- classifying each of the schoolchildren into one of a plurality of mutually exclusive sociometric classifications based on the metrics (Column 1, Last Two Paragraphs, Page 675; Column 2, Paragraphs 1-2, Page 676; Table 1);
- generating a probability score (value, number, metric, measure, etc.) for each schoolchild indicative of the probability of the schoolchild being classified in each sociometric/social classification (Column 2, Page 675; Column 1, Last Two Paragraphs, Page 676; Column 2, Paragraphs 1-3, Page 676; Column 1, Paragraphs 1-2, 4-5, Page 677; Column 1, Last Two Paragraphs, Page 678).

- | | | |
|-------------------|--------------------------|---------------------------------|
| 1. popular: | $z_{SP} > 1$, | $z_{LM} > 0$ and $z_{LL} < 0$; |
| 2. rejected: | $z_{SP} < -1$, | $z_{LM} < 0$ and $z_{LL} > 0$; |
| 3. neglected: | $z_{SI} < -1$, | $z_{LM} < 0$ and $z_{LL} < 0$; |
| 4. controversial: | $z_{SI} > 1$, | $z_{LM} > 0$ and $z_{LL} > 0$; |
| 5. average: | remaining group members. | |

Table 1
Fictitious Ratings on a 7-Point Scale
and Nominations Received by a Person
From Nine Fellow Group Members

Person	P	P*	S	A	I	LM	LL	SP	SI
A	2	-2	0	2	2	0	0	0	0
B	1	-3	0	3	3	0	1	-1	1
C	1	-3	0	3	3	0	1	-1	1
D	5	1	1	0	1	0	0	0	0
E	7	3	3	0	3	1	0	1	1
F	2	-2	0	2	2	0	0	0	0
G	1	-3	0	3	3	0	1	-1	1
H	4	0	0	0	0	0	0	0	0
I	2	-2	0	2	2	0	0	0	0
Total	25	-11	4	15	19	1	3	-2	4

Table 3
 An Example of the Output That SSRAT Can Produce

```

DATA LIST FIXED/ MATNR 1-3 ID 5-9(A) RA 10-12 S 13-15 ES 16-20(1) A 21-23
EA 24-28(1) P 29-31 PLP 32-37(3) PRP 38-43(3) I 44-46 PLI 47-52(3)
PRI 53-58(3) $60.050 59-60 $60.100 69-70.
BEGIN DATA
1 1001 9 27 12.1 0 11.3 63 1.000 0.000 27 1.000 0.025 1 POPULAR 1 POPULAR
1 1002 9 23 12.1 0 11.5 59 0.999 0.002 23 0.430 0.748 1 POPULAR 1 POPULAR
1 1003 9 12 11.8 15 12.1 33 0.394 0.663 27 1.000 0.042 4 CONTROV 5 AVERAGE
1 1004 9 15 12.1 8 11.6 43 0.795 0.228 23 0.409 0.800 5 AVERAGE 5 AVERAGE
1 1005 9 0 11.6 22 12.3 14 0.003 0.998 22 0.195 0.902 2 REJECTD 2 REJECTD
1 1006 9 6 11.6 11 11.6 31 0.292 0.741 17 0.002 1.000 3 NEGLECT 3 NEGLECT
1 1007 9 0 11.5 27 12.3 9 0.000 1.000 27 1.000 0.042 2 REJECTD 2 REJECTD
2 2001 9 9 8.9 14 13.4 31 0.504 0.558 23 0.714 0.481 5 AVERAGE 5 AVERAGE
2 2002 9 9 9.3 13 13.4 32 0.538 0.524 22 0.427 0.755 5 AVERAGE 5 AVERAGE
2 2003 9 11 10.6 12 11.8 35 0.554 0.517 23 0.714 0.481 5 AVERAGE 5 AVERAGE
2 2004 9 12 10.2 9 12.6 39 0.849 0.199 21 0.245 0.882 5 AVERAGE 5 AVERAGE
2 2005 9 12 11.9 11 11.0 37 0.538 0.524 23 0.610 0.595 5 AVERAGE 5 AVERAGE
2 2006 9 9 11.2 14 12.2 31 0.275 0.774 23 0.498 0.720 5 AVERAGE 5 AVERAGE
2 2007 9 13 11.9 11 10.4 38 0.567 0.496 24 0.867 0.286 5 AVERAGE 5 AVERAGE
2 2008 9 10 10.2 11 12.1 35 0.607 0.462 21 0.326 0.826 5 AVERAGE 5 AVERAGE
2 2009 9 13 11.4 11 11.8 38 0.680 0.384 24 0.768 0.445 5 AVERAGE 5 AVERAGE
2 2010 9 9 11.3 15 12.2 30 0.230 0.818 24 0.697 0.536 5 AVERAGE 5 AVERAGE
END DATA.
  
```

[*]
Options EXAMPLE.RAT

Input Options

☐ Assessors in rows

☐ Assessors in columns

Number of points in rating scale
☐ 3 ☐ 5 ☒ 7 ☐ 9

Maximum number of assessors/assessed 31

Significance level 1 0.05

Significance level 2 0.1

Width of identification string 5

Output Options

☐ Full Matrix Output

☐ NewComb & Bukowski

☒ SPSS data file

Figure 1. The Options window of SSRAT.

SSRAT does not expressly teach that the probability score is indicative of sociometric/social classification *upon re-assessment* as claimed.

Official notice is taken that calculating a probability that a classification of one or more items will remain the same or be different upon re-assessment (test-test, temporal stability, stability, over-time, etc.) is old and well known, i.e. official notice is taken that indicating the probability score, concordance, correspondence, accuracy, strength/weakness, etc. of a measure to a classification/category is old and well known

for providing an indication of the how “close” the score is to the “ideal” value(s) for that category, as evidenced by at least the following references:

- Sherman, Lawrence, Sociometry In The Classroom: How To Do It (2000):

Sherman teaches the stability (i.e. fluid or fixed) of sociometric measures/classifications in different settings or over time (Page 41) for the purposes of understanding how and if the schoolchild's sociometric measure will change/evolve (“want to know how the stability or similarity of a child's social status in difference classrooms or even over time, e.g. do kids change or maintain their social status as they grow older”, Paragraph 1, Page 41);

- Maassen et al., Nominations, Ratings and the Dimensions of Sociometric

Status: Paragraph 2, Page 196;

- Frederickson et al., Sociometric Classification Methods in School Peer Groups

(1998): Column 2, Last Paragraph, Page 927; Column 1, Paragraph 1, Page 928;

Column 2, Paragraph 2, Page 930; Table 5; and

- Terry et al., A Comparison of Methods for Defining Sociometric Status Among

Children (1991): Page 873; “The fully asses the stability of the status groups, we must analyze the likelihood that an individual will maintain a particular status.”; Column 1, Paragraph 1, Page 874; Column 1, Last Paragraph, Page 878; Column 1, Paragraphs 2-3, Page 879; Tables 3, 6-7, 9.

It would have been obvious to one skilled in the art at the time of the invention that the sociometric analysis and classification method as taught by SSRAT would have

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benefited from generating a probability score indicative of sociometric/social classification *upon re-assessment* (test-retest, stability, temporal stability, etc.) in view of the teachings of official notice; the resultant system enabling users to judge (see, view, etc.) how close a match the individual is to the category/profile/classification they are categorized in and/or “fully assesses the stability of the status groups, we must analyze the likelihood that an individual will maintain a particular status.” (Terry et al.: Column 1, Paragraph 1, Page 874)

Regarding Claim 49 SSRAT teaches a method of sociometric analysis wherein the probability of each schoolchild's liked most and liked least scores upon re-assessment being greater or less than zero are respectively (Column 2, Last Two Paragraphs, Page 676; Column 1, Paragraphs 1-2, Page 677; Column 2, Paragraph 1, Page 677; Table 3): $PzLMPos = P(zLM > 0)$; $PzLMNeg = 1 - PzLMPos$; $PzLLPos = P(zLL > 0)$ and $PzLLNeg = 1 - PzLLPos$.

Regarding Claim 50 SSRAT teaches a method of sociometric analysis wherein the probability score for each schoolchild are calculated as (Column 2, Last Two Paragraphs, Page 676; Column 1, Paragraphs 1-2, Page 677; Column 2, Paragraph 1, Page 677; Table 3): $P(\text{Popular}) = PzSPPos1 * PzLLNeg * PzLMPos$; $P(\text{Rejected}) = PzSPNeg1 * PzLLPos * PzLMNeg$; $P(\text{Neglected}) = PzSINeg1 * PzLLNeg * PzLMNeg$; $P(\text{Controversial}) = PzSIPos1 * PzLLPos * PzLMPos$; $P(\text{Average}) =$

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$PzSPAverage * PzSIAverage$; and $P(Unclassified) = (PSINominal * PzSPNominal) - P(Average)$.

Regarding Claim 51 SSRAT teaches a method of sociometric analysis further comprising a total probabilities (Column 1, Paragraphs 2-3, Page 678; Column 2, Paragraphs 2-3, Page 676; Table 1): $TotalP = P(Popular) + P(Rejected) + P(Neglected) + P(Controversial) + P(Average) + P(Unclassified)$.

Regarding Claim 52 SSRAT teaches a method of sociometric analysis further comprising calculating the probability of each schoolchild's sociometric social classification wherein the probabilities/sociometric scores are standardized/normalized so that the can be compared to one another (Column 2, Last Two Paragraphs, Page 676). SSRAT further teaches determining a TotalP as well as $P(Popular)$, $P(Rejected)$, $P(Neglected)$, $P(Controversial)$ and $P(Average)$ as discussed above.

SSRAT does not expressly teach calculating the *relative probability* of each schoolchild's sociometric social classification *upon re-assessment* as claimed:

$$RP(Popular) = [P(Popular) / TotalP] * 100$$

$$RP(Rejected) = [P(Rejected) / TotalP] * 100$$

$$RP(Neglected) = [P(Neglected) / TotalP] * 100$$

$$RP(Controversial) = [P(Controversial) / TotalP] * 100$$

$$RP(Average) = [P(Average) / TotalP] * 100; \text{ and}$$

$$RP(\text{Unclassified}) = [P(\text{Unclassified}) / \text{TotalP}] * 100$$

Official notice is taken that comparing schoolchildren within and among the classifications is one of the well known uses of sociometric analysis and classification methods/techniques wherein standardized/normalized sociometric metrics/scores enable “apple-to-apple” relative comparisons. Further it is noted that only simple math is necessary to determine the relative probability for each of the sociometric/social classifications using values known and taught by SSRTA (i.e. TotalP, P(Popular), P(Rejected), P(Neglected), P(Controversial) and P(Average).

It would have been obvious to one skilled in the art at the time of the invention that the sociometric analysis and classification method as taught by SSRAT with its ability to generate TotalP, P(Popular), P(Rejected), P(Neglected), P(Controversial) and P(Average) for the purposes of comparing/relating the sociometric status/classification amongst a group of schoolchildren would have benefited from using well known mathematical techniques to determine the relative probability of schoolchild's sociometric social classification in view of the teachings of official notice.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Peery, Popular, Amiable, Isolated, Rejected: A Reconceptualization of Sociometric Status in Preschool (1979), teaches a method of sociometric analysis of schoolchildren comprising surveying schoolchildren to obtain peer nominations to social preference questions, analyzing the peer nominations to generate standardized social preference and social impact scores and classifying each schoolchild into one of a set of sociometric status groups based on the analysis of the peer nominations.

- MacDonald, Gender and Peer Relations: Sociometric Classification and Behavior Correlates (1993), teach a sociometric analysis of a group of schoolchildren comprising surveying schoolchildren to obtain peer nominations and classifying each schoolchild into one of a plurality of sociometric social classifications based on the nominations.

- Terry et al., A Comparison of Methods for Defining Sociometric Status Among Children (1991), teach a several well-known and widely practiced sociometric analysis methods for analyzing schoolchildren. Terry et al. further teach that surveying schoolchildren to obtain peer nominations (positive and negative nominations), generating standardized social preference and social impact scores from standardized liked most and liked least peer nominations and classifying each schoolchild into one of a plurality of sociometric social classifications (popular, rejected, neglected, average, controversial, etc.) based on the nominations is old and very well known.

- Further Terry et al. teach the importance of determining the relative test-retest stability and reliability of the sociometric classifications.

- DeRosier et al., Children's Academic and Behavioral Adjustment as a Function of the Chronicity and Proximity of Peer Rejection (1994), teaches a method of sociometric analysis of schoolchildren comprising surveying schoolchildren to obtain peer nominations (positive and negative nominations), generating standardized social preference and social impact scores from standardized liked most and liked least peer nominations and classifying each schoolchild into one of a plurality of sociometric social

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classifications (popular, rejected, neglected, average, controversial, etc.) based on the nominations.

- Mize, Peer Reputation and Sociometric Status (1995), teaches several well known methods of sociometric analysis and classification of schoolchildren including but not limited to peer nominations (liked most, liked least, social preference, social impact scores).

- Maassen et al., Nominations, Rations and the Dimensions of Sociometric Status (1997), teach a method of sociometric analysis and classification of schoolchildren using well-known and widely used techniques (e.g. peer nominations, liked most, liked least, social preference, social impact). Maassen et al. further teach a method of displaying the results of a sociometric analysis of a group of schoolchildren wherein schoolchildren nominate peers in response to social preference questions comprising displaying a Cartesian coordinate axes indicating values of two sociometric parameters, plotting points representing schoolchildren in a two-dimensional scatterplot diagram whereby the position of each point corresponds to values of the sociometric parameters associated with each schoolchild; and displaying a plurality of sociometric classifications defined by ranges of the values of the two sociometric parameters, whereby points falling within the areas represent schoolchildren classified into corresponding sociometric social classifications.

TABLE 1
Fictitious Example of Sociometric Scores of One Individual, received from Seven Assessors

Attributed by Person	Score on Liking Dimension (I_{ik})	Liked Most Nomination (LM_{ik})	Liked Least Nomination (LL_{ik})	Preference ($P_{ik} = LM_{ik} - LL_{ik}$)	Impact ($I_k = LM_{ik} + LL_{ik}$)
A	1	1	0	1	1
B	-1	0	1	-1	1
C	1	1	0	1	1
D	0	0	0	0	0
E	-1	0	1	-1	1
F	0	0	0	0	0
G	-1	0	1	-1	1
Total	-1	2	3	-1	5
	$= \Sigma I_{ik}$	$= LM_{ik}$ $= \Sigma LM_{ik}$	$= LL_{ik}$ $= \Sigma LL_{ik}$	$= P_{ik}$ $= \Sigma P_{ik}$	$= I_k$ $= \Sigma I_k$

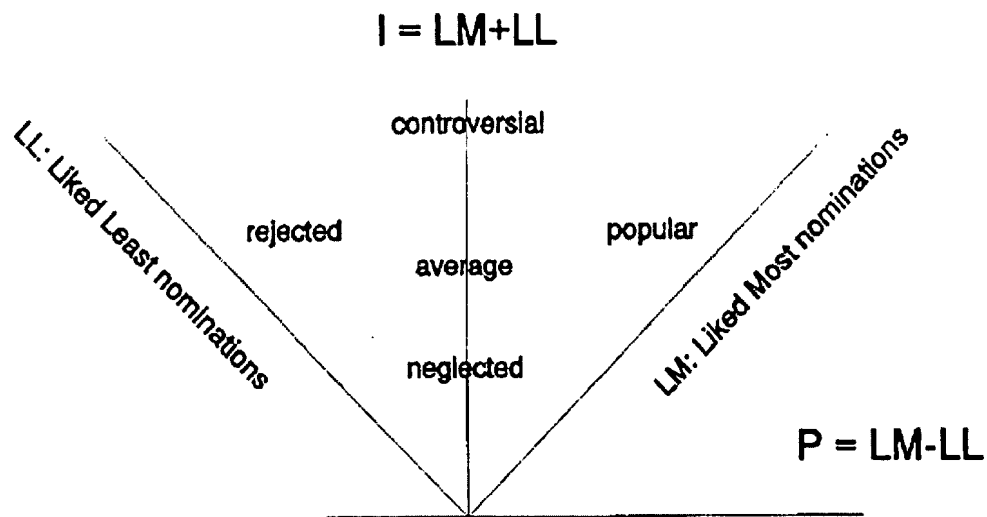


FIG. 1. Location of the sociometric status groups (partly taken from Peery, 1979).

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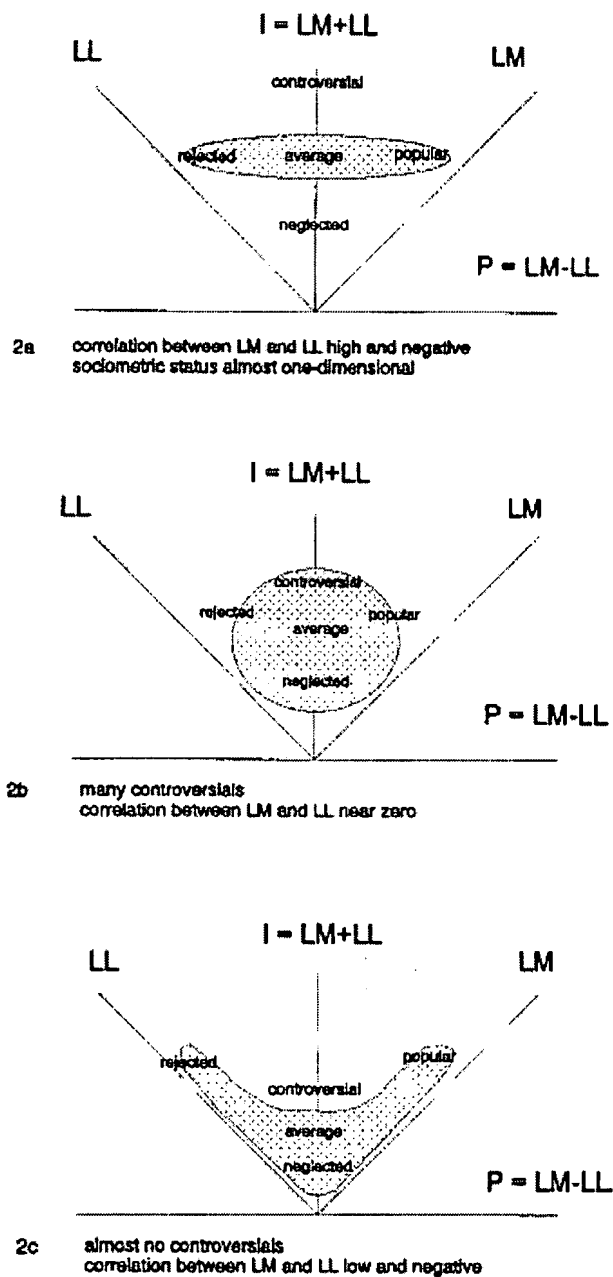


FIG. 2. Some situations corresponding with different correlations between liked least and liked most nominations.

- Maassen, Ratings as validation of sociometric status determined by nominations in longitudinal research (1998) teaches a well known sociometric analysis method comprising surveying schoolchildren to obtain peer nominations (positive and negative nominations), generating standardized social preference and social impact scores from standardized liked most and liked least peer nominations and classifying each schoolchild into one of a plurality of sociometric social classifications (popular, rejected, neglected, average, controversial, etc.) based on the nominations.

Maassen further teaches the importance of understanding the stability of the sociometric classification.

- Maassen et al., SSRAT: The processing of rating scales for the determination of two-dimensional sociometric status (1998), teach a system and method of sociometric analysis of a group of schoolchildren comprising surveying schoolchildren to obtain peer nominations (positive and negative nominations), generating standardized social preference and social impact scores from standardized liked most and liked least peer nominations and classifying each schoolchild into one of a plurality of sociometric social classifications (popular, rejected, neglected, average, controversial, etc.) based on the nominations.


- Frederickson et al., Sociometric Classification Methods in School Peer Groups (1998), teach several well-known methods/techniques (14) of sociometric analysis and sociometric classification of schoolchildren including but not limited to peer nominations, roster and rating scale techniques. Frederickson et al. further teach determining the test-retest reliability of the social classifications.


- Bagwell et al., Peer Clique Participation and Social Status in Preadolescence (2000), teach several well-known methods of sociometric analysis and classification including peer nominations via social preference questions.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott L. Jarrett whose telephone number is (571) 272-7033. The examiner can normally be reached on Monday-Friday, 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hafiz Tariq can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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